

*p. 105*

1) (a) Her daughter is heavier or equal to the weight of 87% of other kids her age. (or 87% of kids are her weight or lighter)

Her daughter is taller than or equal to the height of 67% of kids her age. (or 67% of kids are her height or shorter)

(b) The speed limits on CA highways are equal to or higher than 85% of other roads. (or 85% of other roads have speed limits at or less than the CA roads)

- 2) (a) His performance is better than 80% of his other performances that season, however since the league championships is very competitive and is the fastest runners, his personally good time is only better than 50% of the OTHER runners' times.
- (b) Her time was slow for HER (only faster than 50% of her other times that season), but she is a fast swimmer so her personally slow time is actually faster than 80% of other swimmers in the meet.

3) (a) Francine is 1.45 standard deviations below the average bone density of women her age.

$$(b) -1.45 = \frac{948 - 956}{\text{std dev}}$$

$$\text{std dev} = 5.517 \text{ grams/cm}^2$$